

DEVAL L, PATRICK GOVERNOR TIMOTHY P. MURRAY LIEUTENANT GOVERNOR JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH COMMISSIONER

# The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

01/26/2012

Larry Bates Assistant District Attorney, Suffolk County

Dear ADA Bates,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:

- Curriculum Vitae for Annie Dookhan and Kate Corbett.
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples #
- 4. Analysis sheets with custodial chemist's hand notations and test results.
- 5. GC/Mass Spectral analytical data for samples #

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Kate Corbett analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Ь~ ·

Sincerely.

Annie Dookhan

Chemist

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6622

## Khan, Annie (DPH)

From:

Khan, Annie (DPH)

Sent:

Thursday, January 12, 2012 12:12 PM

To:

Bates, Larry (SUF); Corbett, Kate (DPH)

Subject: RE: Lab Notes and Summons BMC Docket Number

case

Hi Larry,

Hope this email finds you well.

Lab#

Upon reviewing this case, the Lab#s may be incorrect.

At your convenience, could you please check if these are the correct Lab#s?

Sorry for the inconvenience.

Process of elimination

Thanks.

Annie

Drug Analysis Lab

617-983-6622 (work) 617-983-6625 (fax)

From: Bates, Larry (SUF)

Sent: Wednesday, January 11, 2012 2:58 PM To: Khan, Annie (DPH); Corbett, Kate (DPH)

Subject: Lab Notes and Summons BMC Docket Number

case

**Greetings Once More** 

Attached please find a summons for your appearance on the above given case at BMC for Feb 15. Request is also made for you forward a copy of lab notes for case number and should you not be able to attend the court date, please notify me. Lastly, thank you for your assistance.

Larry Bates

#### Curriculum Vitae

### Annie Khan (Dookhan)

#### Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry

University of Massachusetts, Boston, Ma, Bachelor of Science

Major: Biochemistry Minor: Economics

### Experience:

2003 - present

### Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- \*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- \*Writing of the Standard Operating Procedures (SOPs) and Protocols.
- \*Responsible for the Quality Control and Quality Assurance of analytical instruments, reagents and controls/standards.
- \*Maintenance and repairs of analytical instruments.
- \*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- \*Qualified as an expert witness in Massachusetts Courts and U.S. District Court.
- \*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- \*Appointed Assistant Analyst by Assistant Commissioner of Public Health.
- \*Notary Public.

2001 - 2003

### QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- \*Completed proficiency training conducted by a member of the staff within the MBL Quality Control and Quality Assurance Department for the Food and Drug Administration.
- \*Method Development for creating new techniques for the QC Dept. and FDA.
- \*Writing, revising and reviewing the Standard Operating Procedures (SOPs).
- \*Trained and supervised new chemists and interns for the department.
- \*Routine QC testing of products for the FDA.
- \*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- \*Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- \*Complete testing of chemicals for Vendor Validation Project for the FDA.
- \*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

#### **Additional Courses:**

### **Department of Justice - Forensics Professionals**

Introduction to Forensic Drug Chemistry

Chemical Spot Test and Mechanism for Illicit Drugs

Forensic Mass Spectrometry

Forensic Science 101: An Introduction

Fundamentals of Forensic Questioned Documents

Perspectives in Expert Testimony

**Evidence Analysis** 

Ethics in Forensic Science

Transition to Leadership

Fundamentals of Forensic Toxicology

### **Additional Trainings:**

Good Laboratory Practice/Good Manufacturing Practice (GLP/GMP) training with Massachusetts Biologic Laboratory.

Quality Control/Quality Assurance (QC/QA) training according to FDA Codes and Regulations.

Gas Chromatography (GC) and Gas Chromatography/Mass Spectrometry (GC/MS) trainings with Agilent Technologies and Restek.

High Power Liquid Chromatography (HPLC)and HPLC/MS/MS trainings with Waters Cooperation.

Fourier Transform Infrared Spectroscopy (FTIR) training with Spectros and Spectum One.

Ultraviolet-Visible Spectroscopy (UV-Vis) training with Agilent Technologies and Beckman.

Total Organic Carbon Analyzer (TOC) training with MBL and Sievers.

### Associations:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

## Curriculum Vitae

### Kate A. Corbett

### Education

Bachelor of Science Degree, CHEMISTRY May 2003 MERRIMACK COLLEGE

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

### **Employment**

Chemist II State Laboratory Institute (March 2008-Present)

Massachusetts Department of Public Health

**Drug Analysis Laboratory** 

- Responsible for the identification of substance and trafficking substances to determine violation of the Massachusetts drug laws
- Responsible for the identification of pharmaceuticals to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis

Chemist | State Laboratory Institute (2005-March 2008)

Massachusetts Department of Public Health

**Drug Analysis Laboratory** 

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2005.

### Research Associate (September 2003 – August 2005)

SENSOR TECHNOLOGIES, INC - Shrewsbury, MA

- Prepared chemistries used in making sensor beads
- Generated and examined sensors employing fluorescence spectroscopy
- Performed protein, dye and sugar assays using UV/VIS spectrophotometry
- Carried out titrations on ricin using fluorescence correlation spectroscopy
- Statistical analysis of experimental data

Intern (March 2003 – August 2003)

MASSACHUSETTS STATE POLICE CRIME LABORATORY - Sudbury, MA

- Assisted in the gathering of case files to fulfill the National Institute of Justice's No Suspect Backlog Reduction Grant
- Observed in the Evidence, Criminalistics, DNA, Drug, Trace, Toxicology, and Bomb/Arson Units

DRUG RECEIPT	PA	# ok #6'7 ge #6 struction #		
District/Unit D - 4 C C C Name & Rank of Arresting Officer Sql		Lenan	ID#_ 106	2 ح
DEFENDANT'S NAME	AD	DRESS	CITY	STATE
			Besten	MA
			Boston	MA
,			LAB US	SE ONLY
DESCRIPTION OF ITEMS SUBMITT	ED	GROSS QUANTITY	GROSS WEIGHT	ANALYSIS NUMBER
White rock (crack cocain	./	2 plus	4.369	
White pills (800 mg Gasap	entin)	40 pills	20,29	-
Tan powder (Heroin)		46 G/B'S	57+89a	
				-

To be completed by ECU personnel only		
Name and Rank of Submitting Officer Suppl	While	ID#
Received by		Date
		ECU Control #
BPD Form 0038-BIS-0907 (prev. 1753)		्रक्तिका Corbett omail DR

Date Analyzed: < City: Boston D.C.U. Police Dept. Officer: P.O. SYBIL WHITE Def: Subst: SUB Amount: No. Cont: Cont: pb 2 No. Analyzed: \ Date Rec'd: 02/03/2011 Net Weight: 0 · 16 4.36 Gross Wt.: # Tests: 6 🕰 Findings: Prelim: cocurre (2) Date Analyzed: 03-26-い City: Boston D.C.U. Police Dept. Officer: P.O. SYBIL WHITE Def: 40.0 Amount: Subst: TAB No. Cont: 1 Cont: pb Date Rec'd: 02/03/2011 No. Analyzed: Gross Wt.: 20.29 Net Weight: #Tests: \AYL

Prelim: 6

d

Findings: Oploagen to

City: Boston D.C.U. Police Dept. Officer: P.O. SYBIL WHITE

Def: Amount:

No. Cont: Cont: gb 46

Date Rec'd: 02/03/2011

Gross Wt.: 57.89 No. Analyzed: 5

Net Weight: 0.86

Subst: SUB

# Tests: 25 AS D

Prelim: Heron

## DRUG POWDER ANALYSIS FORM

No. of samples tested:		B05400	ANALYST Evidence Wt.	A>9
PHYSICAL DESCRIPTION:	100 8490	इ. ५०० ट १	_	
PRELIMINARY TESTS Spot Tests  Cobalt Thiocyanate ( —) +  Marquis —  Froehde's —  Mecke's			Microcrystalline Tes  Gold Chloride +  TLTA () +  OTHER TESTS	its
PRELIMINARY TEST RESULTS  RESULTS COCONO  DATE 2-8-11		R	ESULTS CONFIRMATORY  MS ERATOR NAC	

## DRUG POWDER ANALYSIS FORM

SAMPLE# AGI	ENCY BOSAN. ANALYST FON
No. of samples tested:	Evidence Wt.
PHYSICAL DESCRIPTION:	Gross Wt():
40 while ood	an +abet Gross Wt ( ):
· / /	୧೪ Pkg. Wt:
	Net Wt: 51 . 2238
8 4 y y y 8	00)
PRELIMINARY TESTS Spot Tests	Microcrystalline Tests
Cobalt Thiocyanate ()	Gold Chloride
Marquis	TLTA ( )
Froehde's	OTHER TESTS
Mecke's	musmar 91F)
PRELIMINARY TEST RESULTS	GC/MS CONFIRMATORY TEST
RESULTS GLADER RECORD	RESULTS
DATE 3-26-11	MS OPERATOR
•	DATE

# **Drug Information**

DRUG NAME: GABAPENTIN

**INGREDIENTS: GABAPENTIN -- 800 MG** 

Color: White Shape: Oval

Imprint: 4444 The tablet is debossed with a hourglass logo and 4444 on one side and 800 on the reverse side., Hourglass 4444 800 The tablet is debossed with a hourglass logo and 4444 on one side and 800 on the

reverse side., 800

Form: Oral Tablet

Available-Container-Size: Bottle of 100, Bottle of 500, Strip of 100, Bottle

of 1000

AAPCC Code: 077730 - Other Types

of Anticonvulsant (Excluding

Barbiturates)

NDC: 0093-4444-01 0093-4444-05 0172-4444-60

0172-4444-70

0172-4444-10

Excipients: Lactose (Monohydrate); Cellulose,

Microcrystalline; Polyethylene Glycol

Regulatory Status: RX

Availability: United States

**Product ID 6738350** 

Contact: Teva Pharmaceuticals

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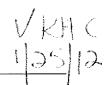
# DRUG POWDER ANALYSIS FORM

SAMPLE#	_ AGENCY BOSAC	<b>)</b> .	ANALYST	420
No. of samples tested: 5	_		vidence Wt.	
PHYSICAL DESCRIPTION:		Gros	ss Wt (45):_	9.7000
Beige powdre	substance	Gros	ss Wt(5):_	1-0902
•	200 04		Pkg. Wt:_	
			Net Wt:	-
, do subsit	-> not weight	d.		
		. •		
DDEL INCLUDIO TECTO				
PRELIMINARY TESTS Spot Tests		Microci	rystalline Tes	ts
Cobalt		Gold		
5 Thiocyanate ( +)	<b>-</b>	Chloride		·
S Marquis +	_	TLTA <u>(</u>	)	
5 Froehde's +	<u>.</u>	<u>01H</u>	IER TESTS	,
5 Mecke's +	<u> </u>	5GC+		
	·			<u></u>
DDEI (MINARY TEST DESIR TO		00/110 000		TEAT
PRELIMINARY TEST RESULTS			FIRMATORY	
RESULTS NON	-		Henov	
DATE 2-08-11	· · · · · · · · · · · · · · · · · · ·	MS OPERATOR	ادمد	
			2-16-11	

## # samples tested; 5

#	Gross Weight	Packet Weight	Net Weight	#	Gross Welght	Packet Weight	Net Weight
1	0.2187	0.1957	0.0180	26			
2	0.2143	0.2007	0.0136	27			
3	0.2164	0.1989	0.0175	28			
4	0.2311	0.2021	0.0290	29			,
5	0.2227	0.2063	0.0164	30			
6				31			
7				32			
8				33			
9				34			
10				35			
11				36			
12	,			37			
13				38			
14				39			
15				40			
16				41			
17				42			
18				43			
19				44			
20				45	\$49		
21				46			
22				47			
23				48			**·
24				49			
25	otions:			50			""

Calculations:



File Name : D:\SYSTEM4\02\_09\_11\770850.D

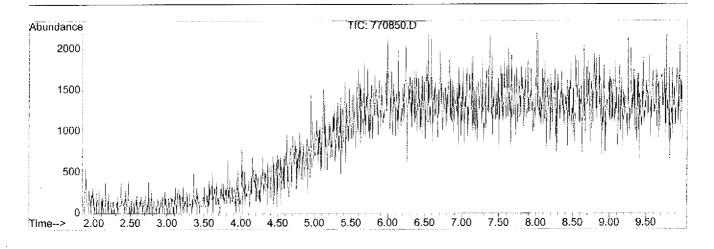
Operator : SLD

Date Acquired : 9 Feb 2011 21:22

Sample Name : BLANK

Submitted by :

Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

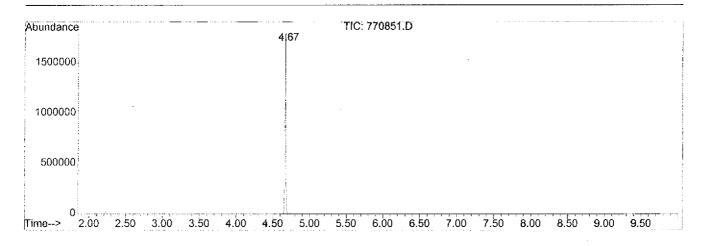
File Name : D:\SYSTEM4\02\_09\_11\770851.D Operator : SLD

Date Acquired: 9 Feb 2011 21:35

Sample Name : COCAINE STD

Submitted by Vial Number

51 : AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.666	1636731	100.00	100.00

File Name : D:\SYSTEM4\02 09 11\770851.D

Operator : SLD

Date Acquired : 9 Feb 2011 21:35

Sample Name : COCAINE STD

Submitted by :

Vial Number : 51 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

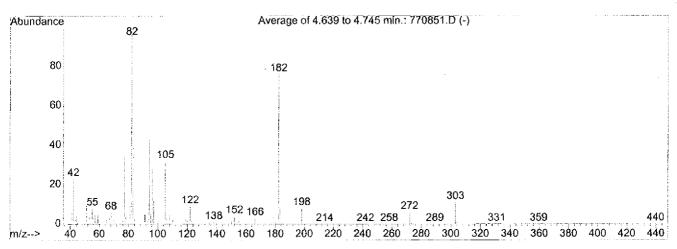
Minimum Quality: 90

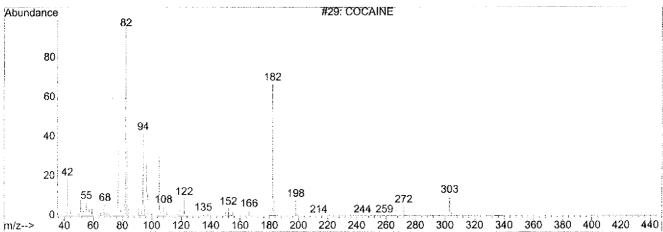
C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	4.67	C:\DATABASE\SLI.L COCAINE	000050-36-2	99





770851.D

Wed Jan 25 11:21:05 2012

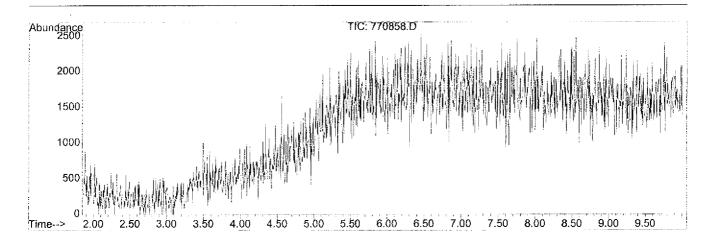
Page 2

File Name : D:\SYSTEM4\02\_09\_11\770858.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:12

Sample Name : BLANK Submitted by : ASD Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

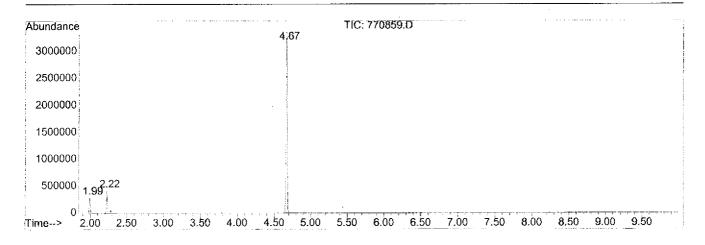
File Name : D:\SYSTEM4\02\_09\_11\770859.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:26

Sample Name :

Submitted by : ASD
Vial Number : 59
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
1.992	295989	6.99	8.31	
2.225	372895	8.81	10.46	
4.668	3563840	84.20	100.00	

770859.D

File Name : D:\SYSTEM4\02 09 11\770859.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:26

Sample Name :

Submitted by : ASD
Vial Number : 59
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

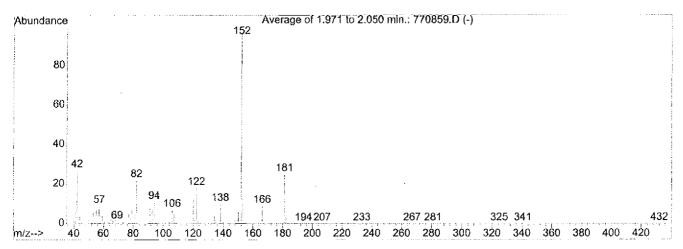
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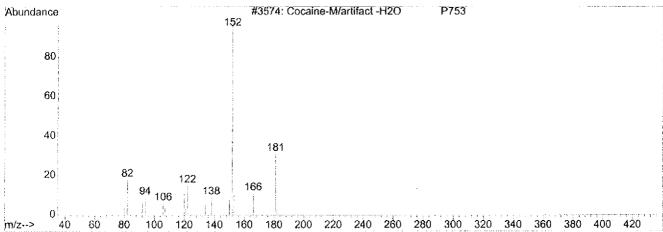
C:\DATABASE\PMW\_TOX2.L

K2.L Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID			CAS#	Qual
 1	1.99	C:\DATABASE\PMW_TOX2.L				
		Cocaine-M/artifact -H2O			000000-00-0	96
		MDA-M (desmethylenyl-methyl-)	ME	@	000000-00-0	37
		Metipranolol-M/artifact AC			000000-00-0	32





770859.D

Wed Jan 25 11:21:20 2012

Page 2

File Name : D:\SYSTEM4\02 09 11\770859.D

Operator : SLD

Date Acquired: 9 Feb 2011 23:26

Sample Name :

Submitted by : ASD
Vial Number : 59
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

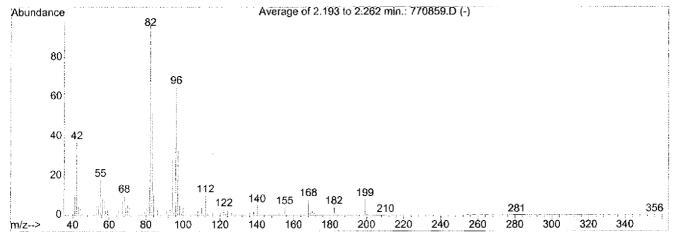
Minimum Quality: 90

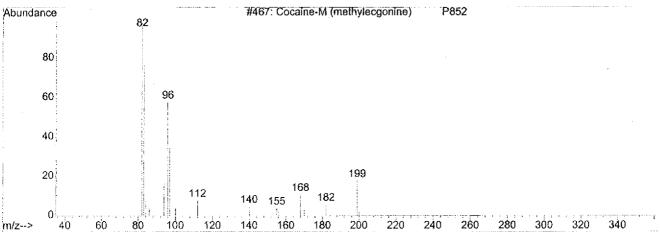
C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID		CAS#	Qual
2	2,22	C:\DATABASE\PMW_TOX2.L Cocaine-M (methylecgonine) Cocaine		007143-09-1 000050-36-2	96 38
		Cocaine-M (methylecgonine)	AC	000000-00-0	9





770859.D

Wed Jan 25 11:21:21 2012

Page 3

File Name : D:\SYSTEM4\02 09 11\770859.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:26

Sample Name :

Submitted by : ASD
Vial Number : 59
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

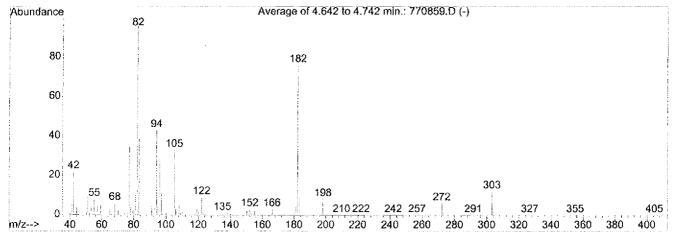
Minimum Quality: 90

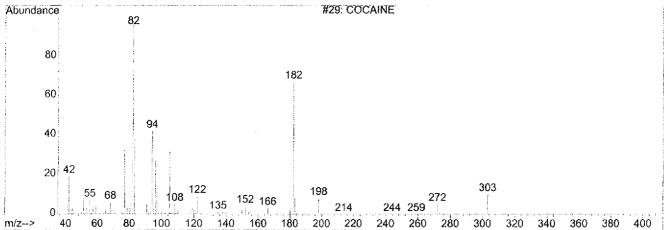
C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
3	4.67	C:\DATABASE\SLI.L COCAINE	000050-36-2	99





770859.D

Wed Jan 25 11:21:22 2012

Page 4

File Name : D:\SYSTEM4\02\_09\_11\770862.D

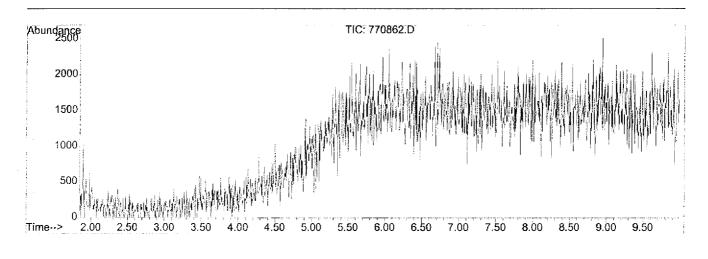
Operator : SLD

Date Acquired : 10 Feb 2011 00:07

Sample Name : BLANK

Submitted by

Vial Number 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : D:\SYSTEM4\02 09 11\770863.D

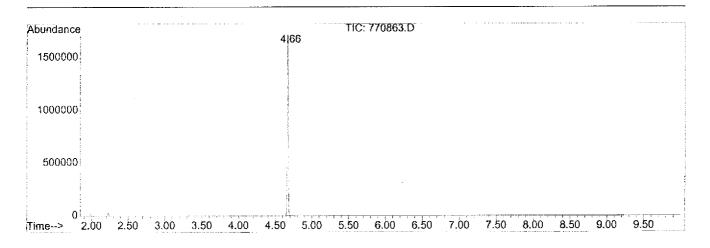
Operator : SLD

Date Acquired : 10 Feb 2011 00:21

Sample Name : COCAINE STD

Submitted by :

Vial Number : 51 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.663	1728398	100.00	100.00

File Name : D:\SYSTEM4\02 09 11\770863.D

Operator : SLD

Date Acquired : 10 Feb 2011 00:21

Sample Name

: COCAINE STD

Submitted by

Vial Number : 51 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

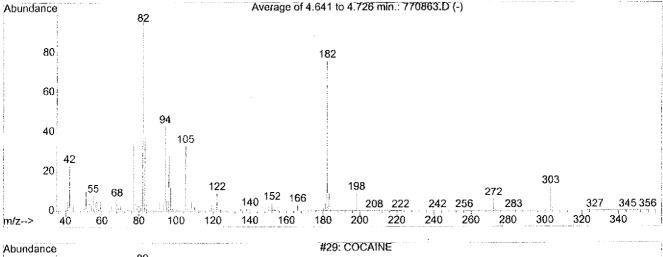
Minimum Quality: 90

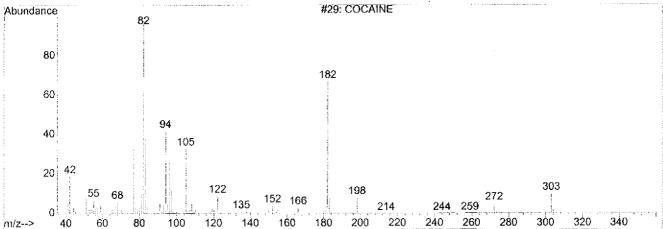
C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
	4.66	C:\DATABASE\SLI.L COCAINE		99





770863.D

Wed Jan 25 11:21:34 2012

Page 2

### Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q1-2011\System7\02\_15\_11\771904.D

Operator : KAC

Date Acquired : 15 Feb 2011 9:25

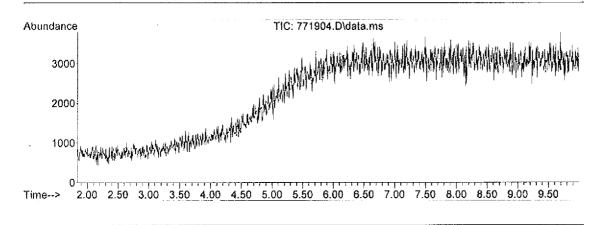
Sample Name : BLANK

Submitted by

Vial Number

AcquisitionMeth: DRUGS.M

Integrator : RTE



Ret. Time

Area

Area %

Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : F:\Q1-2011\System7\02\_15\_11\771905.D

Operator : KAC

Date Acquired : 15 Feb 2011

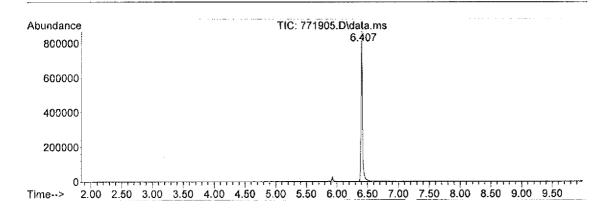
Sample Name : HEROIN STD

Submitted by :

Vial Number : 5

AcquisitionMeth: DRUGS.M

Integrator : RTE



9:38

Ret. Time	Area	Area %	Ratio %
6.407	1376028	100.00	100.00

File Name : F:\Q1-2011\System7\02\_15\_11\771905.D

Operator : KAC

Date Acquired : 15 Feb 2011 9:38

Sample Name : HEROIN STD

Submitted by

Vial Number :

AcquisitionMeth: DRUGS.M : RTE Integrator

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

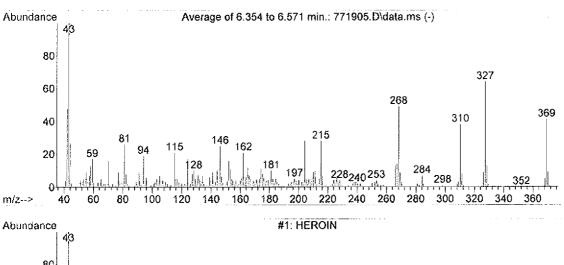
C:\Database\PMW TOX2.L

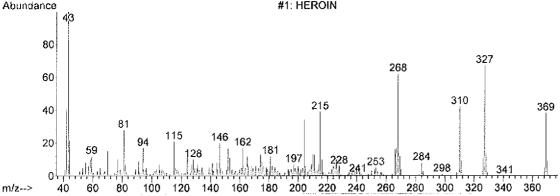
PK# RTLibrary/ID CAS# Qual

1 6.41 C:\Database\SLI.L

HEROIN

000561-27-3 99



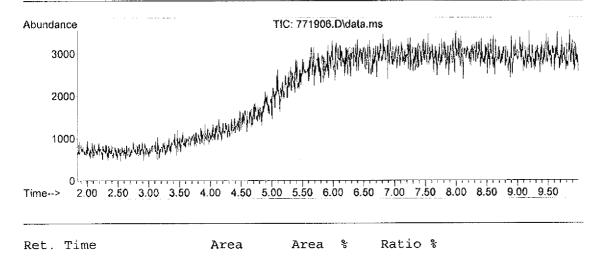


File Name : F:\Q1-2011\System7\02\_15\_11\771906.D

Operator : KAC

Date Acquired : 15 Feb 2011 9:51

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

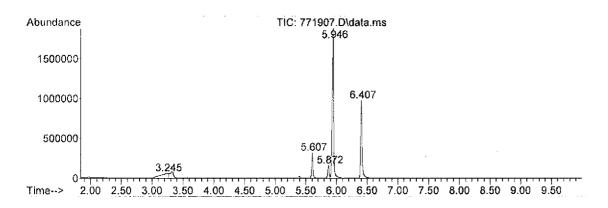
Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name

Submitted by ASD Vial Number

AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.245	512102	8.71	16.45	
5.607	440354	7.49	14.15	
5.872	247462	4.21	7.95	
5.946	3112744	52.91	100.00	
6.407	1570135	26.69	50.44	

File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name :

Submitted by : ASD Vial Number : 7

AcquisitionMeth: DRUGS.M Integrator : RTE

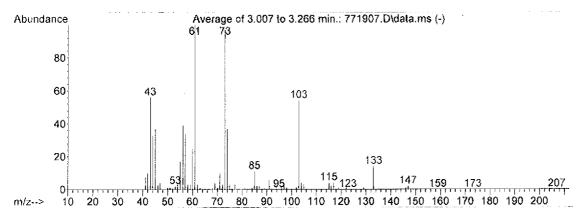
Search Libraries: C:\Database\SLI.L

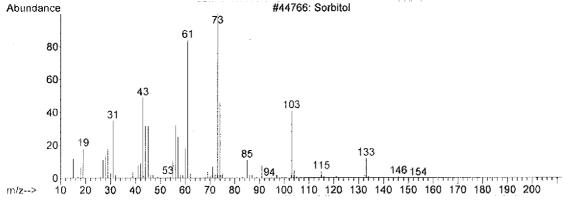
Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	3.25	C:\Database\NIST05a.L Sorbitol Sorbitol Sorbitol	000050-70-4 000050-70-4 000050-70-4	87 86 80





File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name Submitted by ASD Vial Number

AcquisitionMeth: DRUGS.M Integrator : RTE

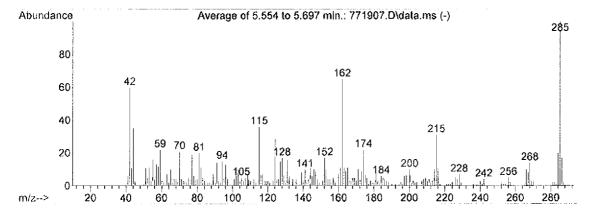
C:\Database\SLI.L Minimum Quality: 80 Search Libraries: Minimum Quality: 80

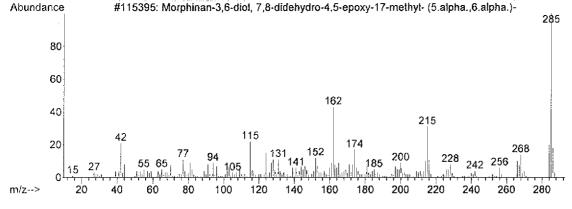
C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

	PK#	RT	Library/ID		CAS#	Qual
_	2	5.61	C:\Database\NIST05a.1	Γ,		
			Morphinan-3,6-diol,		000057-27-2	99
			Morphipan-3.6-diol.	7.8-didehydro-4	000057-27-2	99

Morphinan-3,6-diol, 7,8-didehydro-4 000057-27-2





99

File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name :
Submitted by : ASD
Vial Number : 7
AcquisitionMeth: DRUGS.M
Integrator : RTE

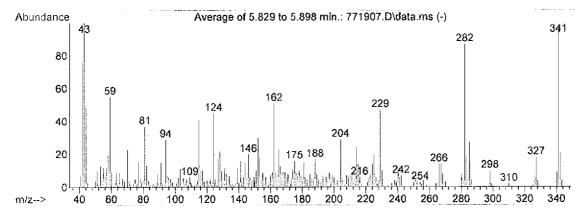
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

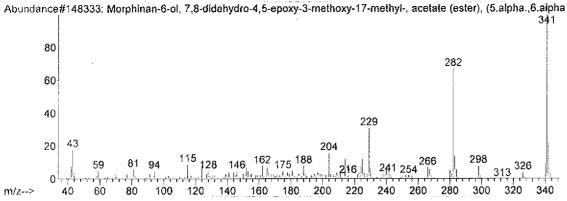
C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual

3 5.87 C:\Database\NIST05a.L Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 97 Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 97 Morphin, 3-acetyl- 1000153-00-1 92





Minimum Quality: 80

File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name : Submitted by : ASD

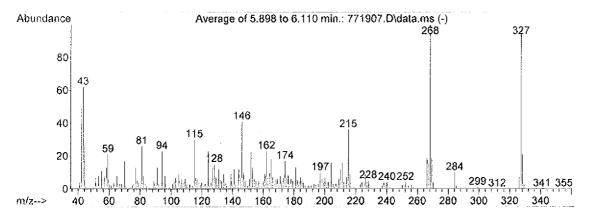
Vial Number : 7 AcquisitionMeth: DRUGS.M Integrator : RTE

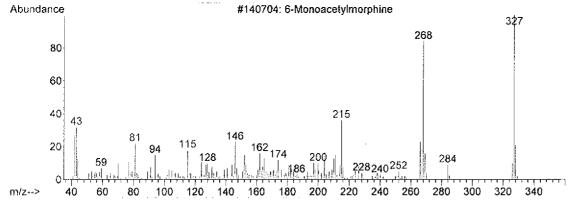
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual
4	5.95	C:\Database\NIST05a.L 6-Monoacetylmorphine 6-Monoacetylmorphine 6-Monoacetylmorphine	002784-73-8 002784-73-8 002784-73-8	99 99 99





Minimum Quality: 80

File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name

ASD

Submitted by Vial Number

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

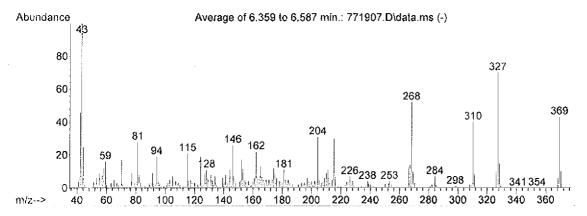
C:\Database\PMW TOX2.L

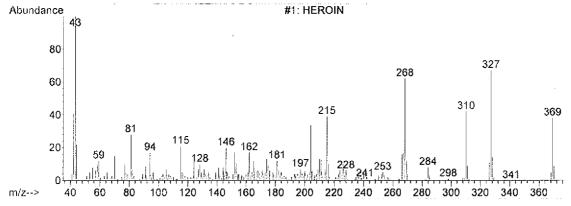
PK# RTLibrary/ID CAS# Qual

5 6.41 C:\Database\SLI.L

HEROIN

000561-27-3 99





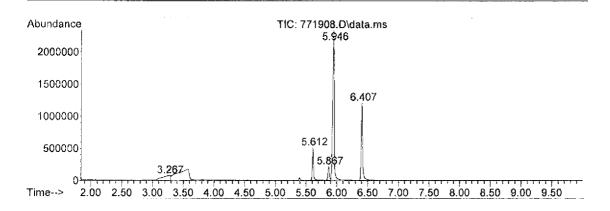
File Name :  $F:\Q1-2011\System7\02_15_11\771908.D$ 

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name :

Submitted by : ASD
Vial Number : 8
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.267	629037	8.12	15.08	
5.612	699390	9.03	16.76	
5.867	334629	4.32	8.02	
5.946	4172296	53.88	100.00	
6,407	1908470	24.65	45.74	

File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name : Submitted by :

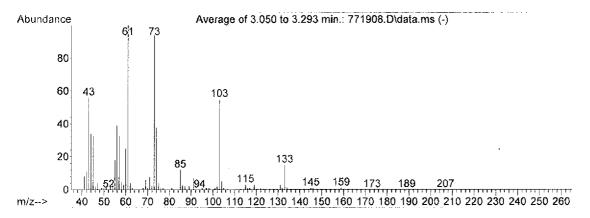
Submitted by : ASD
Vial Number : 8
AcquisitionMeth: DRUGS.M
Integrator : RTE

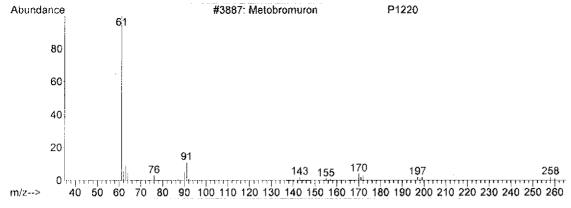
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
 1	3.27	C:\Database\PMW_TOX2.L		
		Metobromuron	003060-89-7	4
		Myristic acid	000544-63-8	2
		Monolinuron	001746-81-2	2





File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name Submitted by

ASD 8 :

Vial Number AcquisitionMeth: DRUGS.M Integrator : RTE

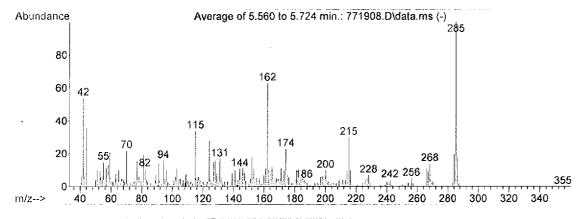
Search Libraries: C:\Database\SLI.L

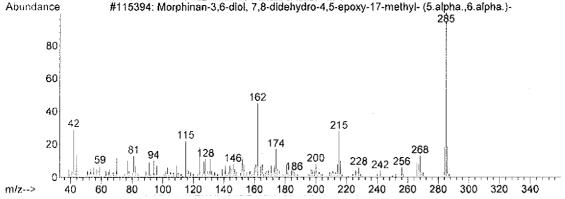
Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID		CAS#	Qual
2	5.61	C:\Database\NIST05a.1 Morphinan-3,6-diol, Morphinan-3,6-diol, Morphinan-3,6-diol,	7,8-didehydro-4 7,8-didehydro-4	000057-27-2	99 99 99





File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

Operator : KAC

Date Acquired 15 Feb 2011 10:16

Sample Name

ASD

Submitted by Vial Number 8 AcquisitionMeth: DRUGS.M Integrator : RTE

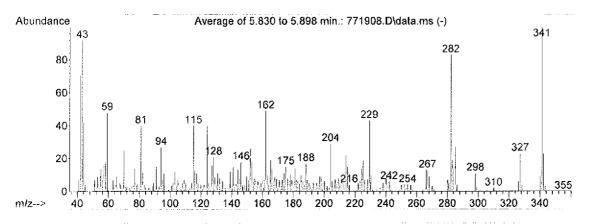
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW\_TOX2.L

Ε	PK#	RT	Library/ID		CAS#	Qual
	3	5.87	C:\Database\NIST	05a.L		
			Morphinan-6-ol,	7,8-didehydro-4,5-e	006703-27-1	99
			Morphinan-6-ol,	7,8-didehydro-4,5-e	006703-27-1	99
			Acetylcodein	-	1000153-00-2	98



Abundance#148334: Morphinan-6-cl, 7,8-didehydro-4,5-epoxy-3-methoxy-17-methyl-, acetate (ester), (5.alpha.,6.alpha 282 80 60 40 229 204 43 20 175 188 266 298 216 326 0 280 180 240 320 m/z--> 40 60 80 100 120 140 160 200 220 260 300

File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name : Submitted by :

: ASD

Vial Number: 8
AcquisitionMeth: DRUGS.M
Integrator: RTE

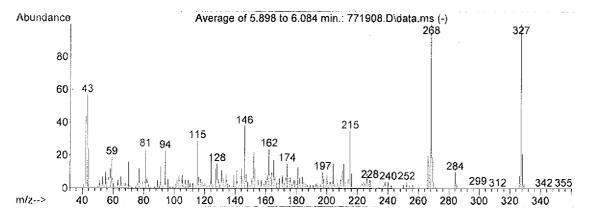
Search Libraries: C:\Database\SLI.L

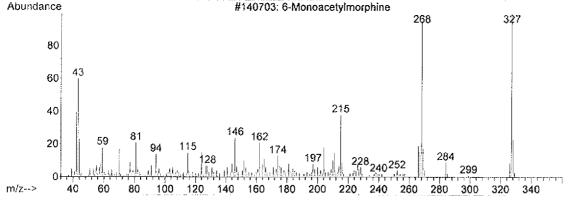
Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
4	5.95	C:\Database\NIST05a.L		
		6-Monoacetylmorphine	002784-73-8	99
		6-Monoacetylmorphine	002784-73-8	99
		6-Monoacetvlmorphine	002784-73-8	99





File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

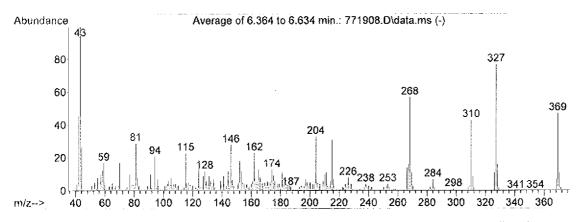
Sample Name : Submitted by : ASD Vial Number : 8

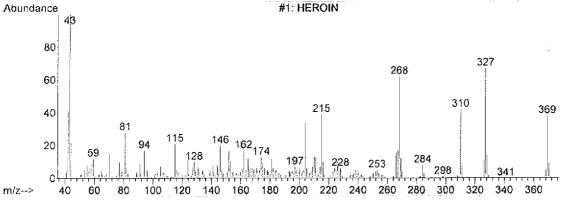
AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

	PK#	RT	Library/ID	CAS#	Qual
_	5	6.41	C:\Database\SLI.L		
			HEROIN	000561-27-3	99
			JWH-073	208987-48-8	2





File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

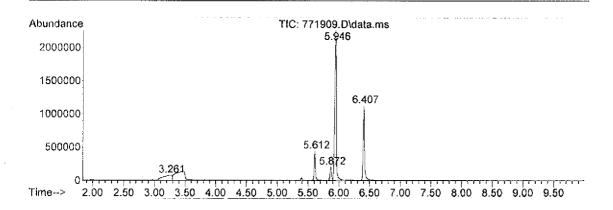
Operator : KAC

Date Acquired : 15 Feb 2011 10:28

Sample Name : Submitted by :

Submitted by : ASD
Vial Number : 9
AcquisitionMeth: DRUGS.M

Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
Too. Time	- Int Cu	nica s	NGCIO 0	
3.261	724023	9.61	18.01	
5.613	634422	8.42	15,78	
5.872	325760	4.32	8.10	
5.946	4020959	53.36	100.00	
6.407	1830160	24.29	45.52	

File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28

Sample Name :

Submitted by : ASD Vial Number : 9

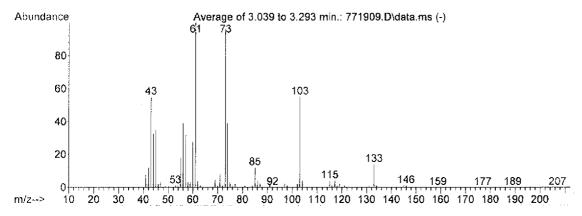
AcquisitionMeth: DRUGS.M

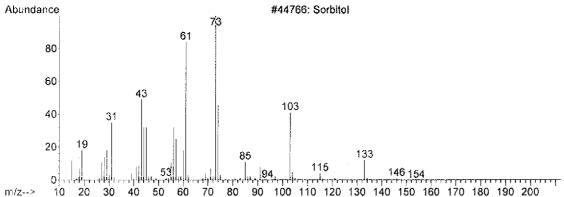
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
1	3.26	C:\Database\NIST05a.L		
		Sorbitol	000050-70-4	87
		D-Mannitol	000069-65-8	78
		Sorbitol	000050-70-4	64





File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

Operator : KAC

Date Acquired 15 Feb 2011 10:28

Sample Name Submitted by ASD

Vial Number 9 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80 Minimum Quality: 80

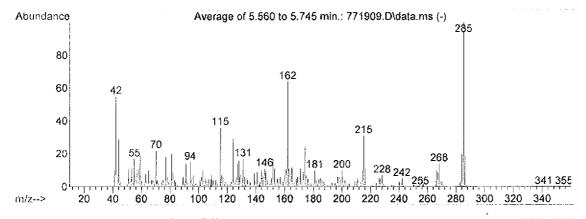
C:\Database\NIST05a.L

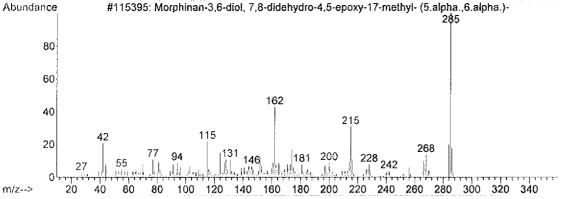
C:\Database\PMW TOX2.L

PK# RTCAS# Library/ID Qual

2 5.61 C:\Database\NIST05a.L

Morphinan-3,6-diol, 7,8-didehydro-4 000057-27-2 Morphinan-3,6-diol, 7,8-didehydro-4 000057-27-2 Morphinan-3,6-diol, 7,8-didehydro-4 000057-27-2 99 99 99





File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

: KAC Operator

Date Acquired 15 Feb 2011 10:28

Sample Name

Submitted by

ASD

Vial Number q AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries:

C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

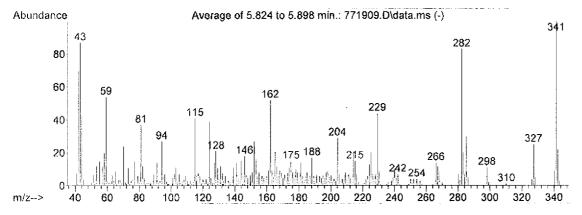
PK# RTLibrary/ID

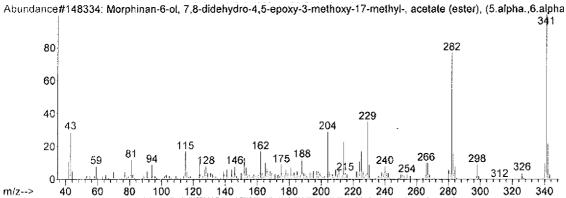
CAS#

Oual

3 5.87 C:\Database\NIST05a.L

Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 99 99 Acetylcodein 1000153-00-2 95





File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28

Sample Name :

Submitted by : ASD

Vial Number : 9 AcquisitionMeth: DRUGS.M Integrator : RTE

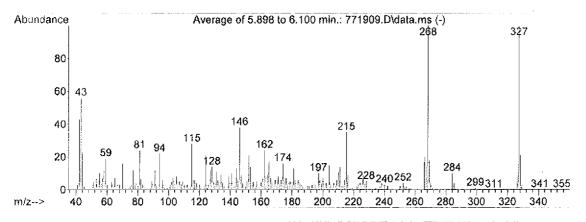
Search Libraries: C:\Database\SLI.L

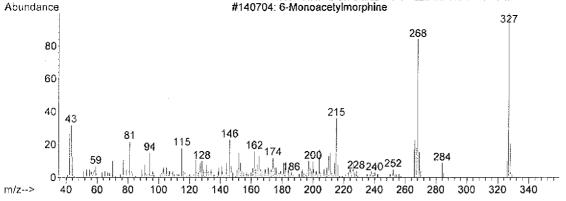
Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
 	- 0-	G \ Dahalaaa \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
4	5.95	C:\Database\NIST05a.L 6-Monoacetylmorphine	002784-73-8	99
		6-Monoacetylmorphine	002784-73-8	99
		6-Monoacetylmorphine	002784-73-8	99





File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28

JWH-073

Sample Name : Submitted by : ASD

Vial Number : 9 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

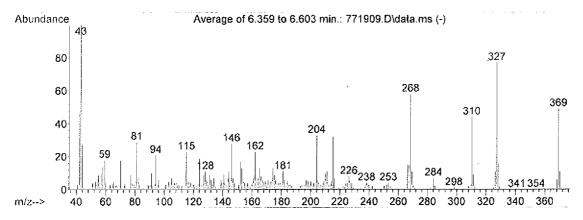
C:\Database\NIST05a.L

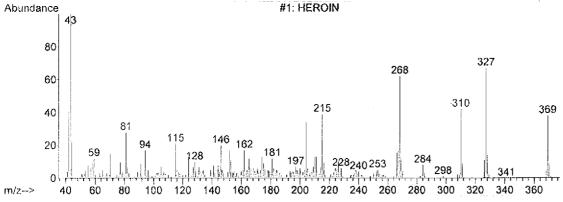
C:\Database\PMW TOX2.L

PK# RT Library/ID CAS# Qual

5 6.41 C:\Database\SLI.L

HEROIN 000561-27-3 99





Minimum Quality: 80

208987-48-8

2

File Name : F:\Q1-2011\System7\02\_15\_11\771910.D

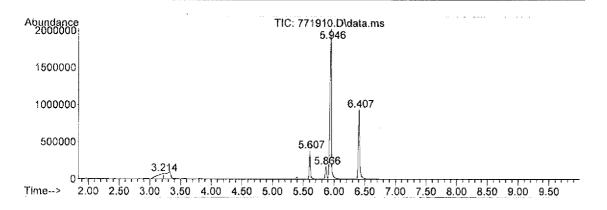
Operator : KAC

Date Acquired : 15 Feb 2011 10:41

Sample Name :

Submitted by : ASD
Vial Number : 10
AcquisitionMeth: DRUGS

AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3,214	497068	7,96	14.52	
5,607	526511	8.43	15.38	
5.866	266490	4.27	7,79	
5.946	3422257	54.80	100.00	
6.407	1532774	24.54	44.79	

File Name : F:\Q1-2011\System7\02\_15\_11\771910.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:41

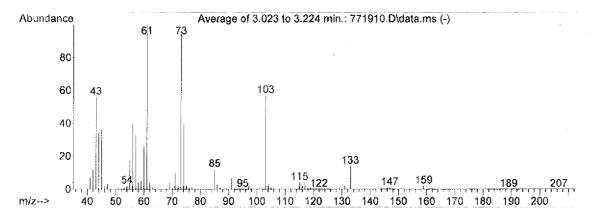
Sample Name : Submitted by : ASD

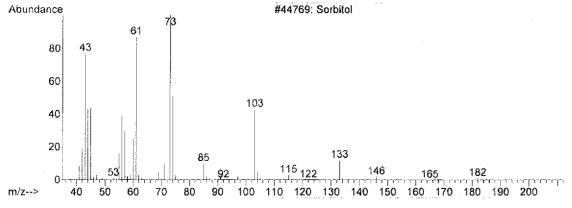
Vial Number : 10 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NTST05a.L Minimum Quality: 80

_	PK#	RT	Library/ID	CAS#	Qual
	1	3.21	C:\Database\NIST05a.L		
			Sorbitol	000050-70-4	80
			Sorbitol	000050-70-4	72
			Sorbitol	000050-70-4	72





File Name : F:\Q1-2011\System7\02\_15\_11\771910.D

Operator : KAC

: 15 Feb 2011 10:41

Date Acquired Sample Name

Submitted by ASD Vial Number 10 AcquisitionMeth: DRUGS.M

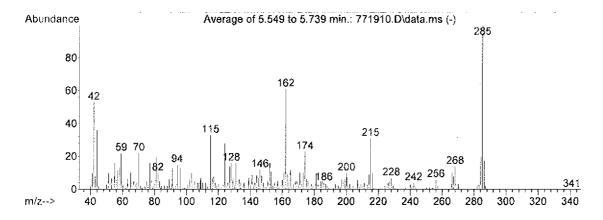
Integrator : RTE

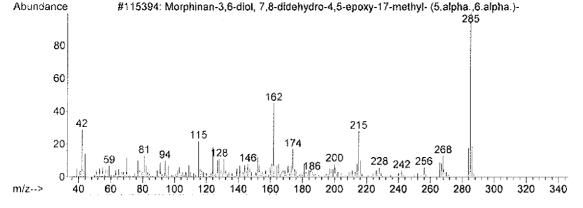
Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

PK#	RT	Library/ID		CAS#	Qual
2	5.61	C:\Database\NIST05a.1	L		
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99





File Name : F:\Q1-2011\System7\02\_15\_11\771910.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:41

Sample Name :

Submitted by : ASD
Vial Number : 10
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries:

RT

PK#

C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

Qual

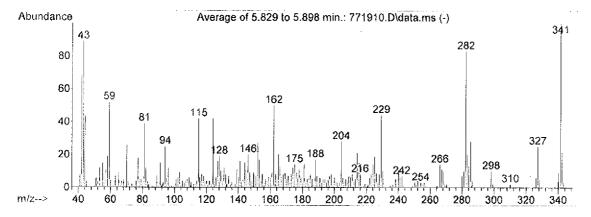
C:\Database\NIST05a.L

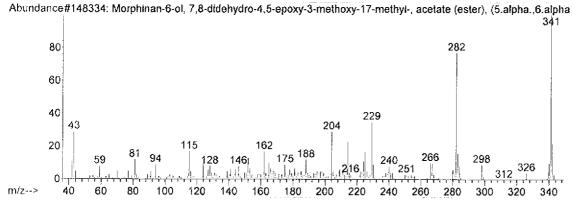
C:\Database\PMW TOX2.L

Library/ID CAS#

3 5.87 C:\Database\NIST05a.L

Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 99 Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 99 Acetylcodein 1000153-00-2 95





File Name : F:\Q1-2011\System7\02 15 11\771910.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:41

Sample Name : Submitted by ASD

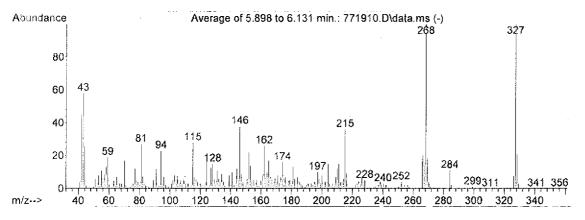
Submitted by : ASD
Vial Number : 10
AcquisitionMeth: DRUGS.M
Integrator : RTE

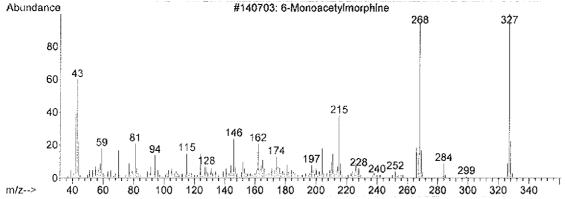
Search Libraries: C:\Database\SLI.L

ase\SLI.L Minimum Quality: 80 ase\NIST05a.L Minimum Quality: 80

C:\Database\NIST05a.L

PK#	RT	Library/ID	CAS#	Qual
 4	5,95	C:\Database\NIST05a.L 6-Monoacetylmorphine	002784-73-8	99
		6-Monoacetylmorphine	002784-73-8	99
		6-Monoacetylmorphine	002784-73-8	99





File Name : F:\Q1-2011\System7\02\_15\_11\771910.D

Operator : KAC

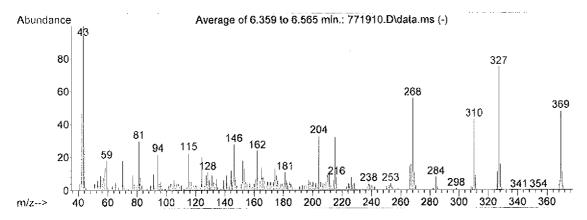
Date Acquired : 15 Feb 2011 10:41

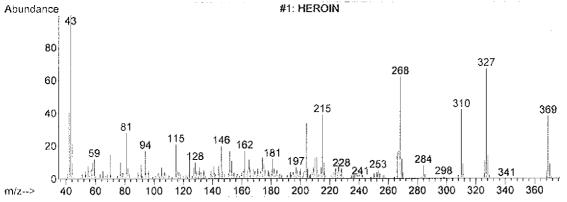
Sample Name :
Submitted by : ASD
Vial Number : 10
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

PK	# RT	Library/ID	CAS#	Qual
5	6.41	C:\Database\SLI.L		
		HEROIN	000561-27-3	99
		JWH-073	208987-48-8	2





File Name : F:\Q1-2011\System7\02 15 11\771911.D

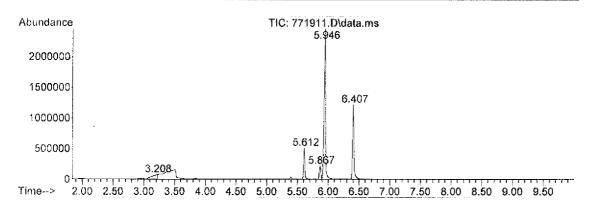
Operator : KAC

Date Acquired : 15 Feb 2011 10:54

; Sample Name

Submitted by : ASD Vial Number 11 AcquisitionMeth: DRUGS.M

Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.208	404964	5.32	9.62	
5.612	713169	9.37	16.94	
5.867	351629	4.62	8.35	
5.946	4210108	55.33	100.00	
6.407	1928628	25.35	45.81	

File Name : F:\Q1-2011\System7\02 15 11\771911.D

: KAC Operator

Date Acquired : 15 Feb 2011 10:54

Sample Name Submitted by ASD Vial Number

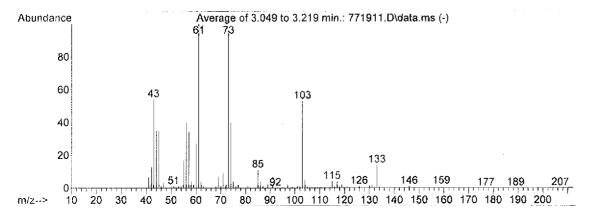
AcquisitionMeth: DRUGS.M Integrator : RTE

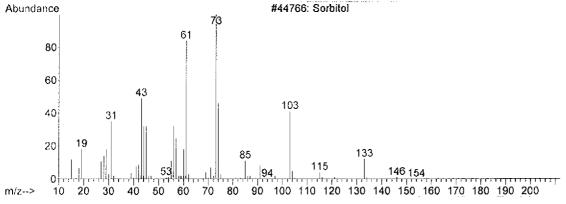
Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

PK#	RT	Library/ID	CAS#	Qual
1.	3.21	C:\Database\NIST05a.L Sorbitol Sorbitol D-Mannitol	000050-70-4 000050-70-4 000069-65-8	87 86 83





File Name : F:\Q1-2011\System7\02 15 11\771911.D

Operator KAC

Date Acquired 15 Feb 2011 10:54

Sample Name

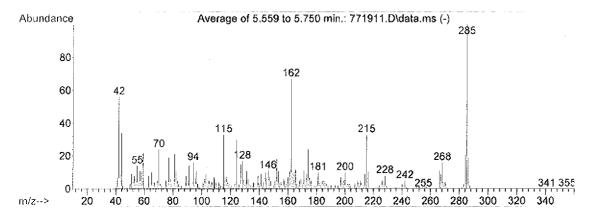
Submitted by ASD Vial Number 11 AcquisitionMeth: DRUGS.M Integrator : RTE

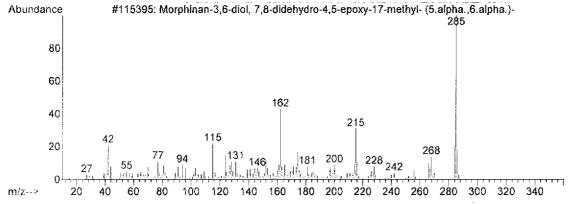
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

PK#	RT	Library/ID		CAS#	Qual
2	5.61	C:\Database\NIST05a	 L		
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol,	7.8-didehydro-4	000057-27-2	99





: F:\Q1-2011\System7\02\_15\_11\771911.D File Name

Operator : KAC

Date Acquired : 15 Feb 2011 10:54

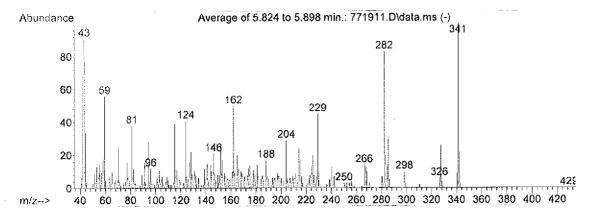
Sample Name Submitted by ASD Vial Number 11

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

PK#	RT	Library/ID		CAS#	Qual
3	5.87		05a.L 7,8-didehydro-4,5-e 7,8-didehydro-4,5-e		99 96 95



Abundance#148334: Morphinan-6-ol, 7,8-didehydro-4,5-epoxy-3-methoxy-17-methyl-, acetate (ester), (5.alpha.,6.alpha 341 282 80 60 40 229 204 43 20 81 266 298 59 326 250 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 m/z-->

File Name : F:\Q1-2011\System7\02\_15\_11\771911.D

Operator : KAC

Date Acquired 15 Feb 2011 10:54

Sample Name Submitted by

ASD 11

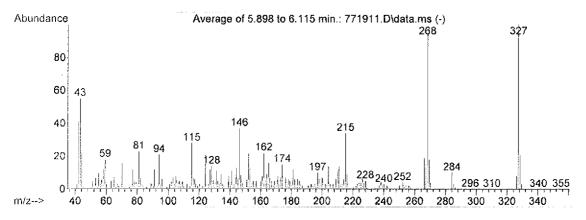
Vial Number AcquisitionMeth: DRUGS.M Integrator : RTE

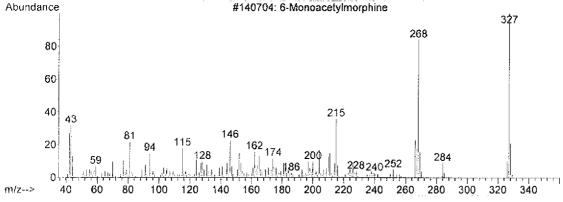
Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

PK#	RT	Library/ID	CAS#	Qual
4 5.95 C:\Database\NIST05a.L 6-Monoacetylmorphine 6-Monoacetylmorphine 6-Monoacetylmorphine		002784-73-8 002784-73-8 002784-73-8	99 99 99	





File Name : F:\Q1-2011\System7\02\_15\_11\771911.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:54

Sample Name :

Submitted by : ASD Vial Number : 11

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries:

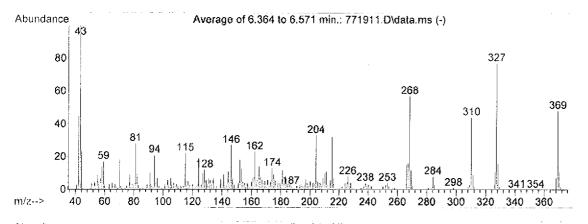
C:\Database\SLI.L

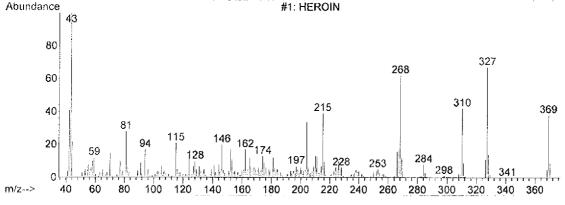
Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
5	6.41	C:\Database\SLI.L		
		HEROIN	000561-27-3	99
		JWH-073	208987-48-8	2





File Name : F:\Q1-2011\System7\02 15 11\771922.D

Operator : KAC

Date Acquired : 15 Feb 2011 13:12

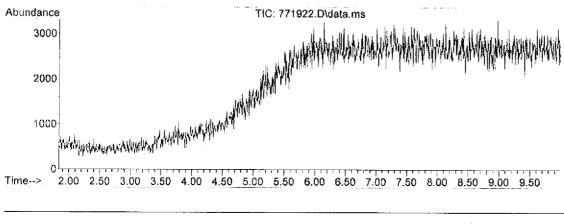
Sample Name : BLANK

Submitted by :

Vial Number :

AcquisitionMeth: DRUGS.M

Integrator : RTE



Ret. Time

Area

Area %

Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : F:\Q1-2011\System7\02\_15\_11\771923.D

: KAC Operator

Date Acquired : 15 Feb 2011 13:25

Sample Name

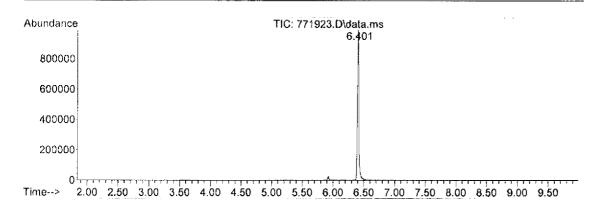
: HEROIN STD

Submitted by Vial Number

23

AcquisitionMeth: DRUGS.M

Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.401	1598308		100.00

File Name : F:\Q1-2011\System7\02\_15\_11\771923.D

Operator : KAC

Date Acquired : 15 Feb 2011 13:25

Sample Name : HEROIN STD

Submitted by :

Vial Number : 23 AcquisitionMeth: DRUGS.M Integrator : RTE

\_\_\_\_\_

Search Libraries: C:\Database\SLI.L

C:\Database\SLI.L Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW TOX2.L

PK# RT Library/ID CAS# Qual

1 6.40 C:\Database\SLI.L

HEROIN

000561-27~3 99

31-21-3

